From:	Mcburney, Jonathan D
To:	Coltrain, Katrina; Kady, Thomas
Cc:	Teri Mcmillan (tmcmillan@eaest.com); cradu@eaest.com; lvega_eaest.com; Todd Downham; Turner, Philip; Barry Forsythe
Subject:	RE: wilcox--Field investigation draft figures
Date:	Thursday, March 17, 2016 1:55:28 PM

See my answers below.

Jon

From: Coltrain, Katrina [mailto:coltrain.katrina@epa.gov]
Sent: Thursday, March 17, 2016 2:40 PM
To: Kady, Thomas <Kady.Thomas@epa.gov>; Mcburney, Jonathan D (US) <jonathan.d.mcburney@lmco.com>
Cc: Teri Mcmillan (tmcmillan@eaest.com) <tmcmillan@eaest.com>; cradu@eaest.com; lvega_eaest.com <lvega@eaest.com>; Todd Downham <todd.downham@deq.ok.gov>; Turner, Philip <Turner.Philip@epa.gov>; Barry Forsythe <barry_forsythe@fws.gov>
Subject: EXTERNAL: wilcox--Field investigation draft figures

Tom/Jon, I like the figures. It is nice to have the information all in one location. Please see a few notes below.

1. I know a lot of time and work has gone into these figures. Is it possible to show the 2D image on a consistent background. For example, Tank Farm Tank 3 is superimposed on the aerial while Tank Farm Tank 5 is superimposed on the sanborn. I like the sanborn because it shows the fluorescence in relation to the Tank that was there.

    A. I'm working on this. It has kind of evolved as I go along. I will be changing all 2D max plumes to the 1956 aerial. I'll work on the rest.

2. Please include a legend for
    a. the symbols: the green plus marks, the red circles, the triangles, etc

        A. Already working on this one.

    b. an identifier for the x and y-axes on the LIF logs. Assume y is depth and x is %fluorescence.

        A. I'll think about how to best represent this.

    c. define GRO/DRO/ORO and mg/kg
3. Will the text explain the use of the color coding? Will the text explain in detail how the contours were developed (not just for this tank, but for all areas)? A. YES
    a. For example, LOR-1 has a log that is up in the yellow/orange range of %fluorescence but the 2D image shows the location as green which represents a lower %fluorescence and Log LOR-35 is green but has peaks that appear to be between 30-50 %fluorescence and shows blue for the triangle representing the location. It appears that the triangle color is a representation of the fluorescence

at the surface and does not give any indication about what is at depth. Can the triangle be all one color that just represents location with no ties to the fluorescence.

b. Tank Farm Tank 3: Logs TF-03-05, TF-03-06, and TF-03-09 look to have peaks that exceed 3% but they are not included within the designated fluorescence area.

A. I'm working on this, will be using a different 2D Max Plume. However, remember that this is a numeric model. If there is a small blip above 3%, it will affect the model, but may not end up within the boundaries. There will be more of this type of discussion within the text portion. Also, this 2D Max I believe is all values above 5%.

c. Please note that this is seen in several figures, this is just used as an example: LOR-15, LOR-03, LOR-31, TF-05-10, TF-06-05, TF-06-07, TF-06-10, TF-07-03, TF-07-04, TF-08-01, TF-09 (several), TF-10-08, P-04-01.

4. Sample Data---LOR-18 and LOR-25A: many of the contaminants are listed two or three times in the table. Was there a duplicate taken here? If so, please separate results for each. Does one represent PAH SIM?

A. What we are seeing is the effect of dilutions, re-runs and PAH vs PAH SIM. I have reported all results.

5. Can you add the 3-D images to the Lorraine figures as was done for the tank farm. Or perhaps, since cross-sections of the plume were presented; the corresponding 3-D cross-section would be good. This will give us a better visualization of the depth and thickness of the fluorescence.

A. I tried the 3-D for the Lorrain Facility. It is so thin that I did not feel it showed well. I will investigate cross sections.

6. Tank Farm Tank 3: Logs TF-03-05, TF-03-06, and TF-03-09 look to have peaks that exceed 3% but they are not included within the designated fluorescence area. [Please note that this is seen in several figures, this is just used as an example.] Will the text explain in detail how the contours were developed (not just for this tank, but for all areas)? This is an awesome 3Dimage, how can I get my view of the 4DIM to look like this? A. Practice, Practice, Practice.

7. Tank Farm Tank 6: The inset showing the location of Tank 6 is not the correct location. The inset is showing the pit (P-04) rather than Tank 6 which is located just above the pit. A. Oops. Will correct.

8. Tank 10: is it possible to show the 3-D image in cross section so the depth can be seen? A. Will look into this one. Once again, I think it was difficult to get a really good 3D visual.

9. Tank 13: Although nothing was noted, for completeness please include a figure for it.
A. Will do.

Thanks

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